

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/AU2004/001130

## A. CLASSIFICATION OF SUBJECT MATTER

Int. Cl. <sup>7</sup>: E03B 3/28, B01D 5/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
WPAT (IPC marks: E03B 3/28, B01D 5/00 and keywords: water, air, condense and like terms)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0597716 B (DIL SHAM VENTURES) 15 July 1998 Whole document	1 - 34
A	US 5857344 A (ROSENTHAL) 12 January 1999 Abstract	1 - 34
A	US 6156102 A (CONRAD et al.) 5 December 2000 Abstract	1 - 34
A	US 6336957 B (TSYMERMAN) 8 January 2002 Abstract	1 - 34



Further documents are listed in the continuation of Box C



See patent family annex

\* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "I" Inter document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search  
12 October 2004

Date of mailing of the international search report

18 OCT 2004

Name and mailing address of the ISA/AU

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**Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)**

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)

**Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)**

This International Searching Authority found multiple inventions in this international application, as follows:

The international application does not comply with the requirements of unity of invention because it does not relate to one invention or to a group of inventions so linked as to form a single general inventive concept. In coming to this conclusion the International Searching Authority has found that there are different inventions as follows:

- (i) Claims 1, 14, 32 and their appended claims relate to a method/apparatus for collecting water from the ambient air. It is considered that "passing a gas into an enclosed space containing a mixture of the gas and a refrigerant vapour evaporated from a liquid refrigerant such that heat is drawn from condensation surface into the refrigerant so that water is condensed from the ambient air contacting the condensation surface" comprises a first "special technical feature".
- (ii) Claims 35, 38, 39 and their appended claims relate to a method/apparatus of separating a gas from a gaseous refrigerant mixture. It is considered that "mixing a liquid absorbent with gaseous mixture facilitating contact of the gaseous mixture with liquid absorbent" comprises a second special technical feature.
- (iii) Claim 40 and its appended claim relate to a method of providing heating. It is considered that "condensing a liquid refrigerant from a gaseous mixture and drawing heat from the condenser to provide the heat" comprises a third special technical feature.
- (iv) Claim 42 and its appended claims relate to a method of providing cooling. It is considered that "contacting a cooled cooling surface with ambient air and using the ambient air to provide the cooling" comprises a fourth special technical feature.
- (v) Claim 45 relates to a solar heating device. It is considered that "a pair of spaced apart reservoirs containing a refrigerant for pivoting a reflector for reflecting the solar heat on to an object to be heated" comprises a fifth special technical feature.

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: 1 - 34

Remark on Protest

☐ The additional search fees were accompanied by the applicant's protest.

☐ No protest accompanied the payment of additional search fees.

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**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No.

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This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report		Patent Family Member			
EP	0597716	CN	1094469	IL	103729
US	5857344	US	5636521		
US	6156102	AU	10242/00	CA	2288543
				WO	0027506
US	6336957	AU	43879/99	EP	1088138
		WO	9966136	IL	124978
Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.					
END OF ANNEX					

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